



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,600	01/21/2004	Ichiro Matsuyama	1232-5255	5048
27123	7590	08/18/2006	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			UHLENHAKE, JASON S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/762,600	Applicant(s) MATSUYAMA, ICHIRO	
	Examiner Jason Uhlenhake	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26 - 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irizawa et al (U.S. Pub. 2003/0085956) in view of Ohtsuka et al (U.S. Pat. 6,145,950), Jones (U.S. Pat. 6,648,435), and Mizutani (U.S. Pat. 5,774,146)

Irizawa discloses:

- ***regarding claim 26***, a printing apparatus capable of printing an image on a plurality of types of printing media by selectively using a plurality of types of inks including a pigment ink and dye ink (Paragraphs 0013, 0017, 0024, 0043); a discrimination portion for discrimination whether the type of said ink used for printing the image is said pigment ink or said dye ink (Paragraphs 0013, 0017, 0024, 0043)
- ***further regarding claim 26, and regarding claim 28, claim 29***, a storage portion for storing information indicating applicability relations between different types of inks and different types of printing media, the types of printing media including a print medium having the applicability relations with both said pigment ink and said dye ink, a printing medium having the applicability relation with said pigment ink but not having the applicability relation with said dye ink, and printing medium having the

Art Unit: 2853

applicability relation with said dye ink but not having the applicability relation with said pigment ink (Paragraphs 0013, 0024, 0079)

- **regarding claim 27**, a discrimination portion for discriminating the type of said printing material used for printing of the image (Paragraphs 0017, 0043); a storage portion for storing information indicating applicability relations between different types of said printing materials and different types of said printing media (Paragraph 0079)

- **further regarding claim 28**, information processing apparatus connect to a printing apparatus capable of printing an image on a plurality of types of printing medium by selectively using a plurality of types of inks including a pigment ink and a dye ink (Paragraphs 0013, 0017, 0024, 0043, 0142)

- an input portion for inputting the type of ink used by the printing apparatus (Abstract, Paragraph 0079)

- **regarding claim 29**, printing system including a printing apparatus capable of printing an image on a plurality of types of printing media by selectively using a plurality of types of inks including a pigment ink and dye ink (Paragraphs 0013, 0017, 0024, 0043, 0142)

- **further regarding claim 29, regarding claim 30, regarding claim 32, regarding claim 34, and regarding claim 35**, a discrimination portion for discriminating whether the type of said ink used for printing the image is said pigment ink or said dye ink (Paragraphs 0013, 0017, 0024, 0043)

- **further regarding claim 30**, method for selecting a printing medium from among a plurality of types of printing media, on which an image is printed, when printing

Art Unit: 2853

the image by selectively using a plurality of types of inks including a pigment ink and dye ink (Paragraphs 0013, 0017, 0024, 0043, 0142)

- ***further regarding claim 30, regarding claim 32, regarding claim 34, and regarding claim 35***, the types of printing media include a printing medium having the applicability relations with both pigment ink and dye ink, a printing medium having the applicability relation with the pigment ink but no having the applicability relation with the dye ink, and a printing medium having the applicability relation with the dye ink but not having the applicability relation with the pigment ink (Paragraphs 0013, 0017, 0024, 0043, 0079)

- ***regarding claim 31 and regarding claim 33***, discriminating the type of printing material used for printing the image (Paragraphs 0013, 0017, 0043, 0079)

- ***further regarding claim 32***, a program for selecting a printing medium from among a plurality of types of printing media, on which an image is printed, when printing the image by selectively using a plurality of types of inks including a pigment ink and a dye ink (Paragraphs 0013, 0017, 0024, 0043)

- ***further regarding claim 33***, a program for selecting a printing medium from among a plurality of types of printing media, on which an image is printed, when printing the image by selectively using a plurality of types of printing materials (Paragraphs 0017, 0043, 0079)

- ***further regarding claim 34***, computer-readable storage medium storing the program for selecting a printing medium from among a plurality of types of printing media, on which an image is printed, when printing the image by selectively using a

Art Unit: 2853

plurality of types of inks including a pigment ink and a dye ink (Paragraphs 0013, 0017, 0043, 0079)

- **further regarding claim 35**, method for printing an image on printing media of a plurality of types by selectively using a plurality of types of inks including a pigment ink and dye ink (Paragraphs 0013, 0017, 0043, 0079)

- **further regarding claims 26,29,30,32,34, and 35**, at least one ink tank (Figure 3; Paragraph 0067)

Irizawa does not disclose expressly the following:

- **regarding claim 26 and claim 28, claim 29**, a display portion displaying a plurality of types of printing media

- display control means for controlling display portion, on the basis of information indicating the type of said inks discriminated by discrimination portion and information stored in storage portion, to display the type of printing medium having the applicability relation with the type of ink discriminated by discrimination portion

- a selection portion for selecting, from among two or more types of printing media displayed by display portion, the type of said printing medium used for printing

- **regarding claim 27**, a display portion for displaying all the types of printing media useable in printing apparatus

- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing

- **further regarding claim 27, regarding claim 31, and regarding claim 33**, warning means for issuing a warning when the type of said printing medium

Art Unit: 2853

selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion

- ***regarding claim 30, regarding claim 32, regarding claim 33, regarding claim 34, and regarding claim 35,*** displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step

- ***further regarding claim 30, regarding claim 32, regarding claim 34, and regarding claim 35,*** two or more types of printing media are displayed which having the applicability relation with the type of ink discriminated by discrimination portion, and the type of printing medium is not displayed which having no applicability relation with the type of ink discriminated by discrimination portion

- ***further regarding claim 31,*** displaying, as reference information for selecting printing medium on which the image is printed, the plurality of types of printing medium adaptable to the type of printing material discriminated by discriminating step

- ***further regarding claims 27,28,33 and 35,*** selecting/reselecting printing medium on which the image is printed on the basis of the reference information; effecting printing on printing medium selected by selecting step

- ***further regarding claims 26,29,30,32,34, and 35,*** wherein the discrimination portion determines the type of the ink based on the shape of the ink tank

- ***further regarding claims 27,28,31, and 33,*** determining means for determining the type of the printing medium, as a printing medium to be used for the

Art Unit: 2853

printing, which is the type of printing medium warned or not warned by the warning means

Ohtsuka et al discloses:

- ***regarding claim 26 and claim 28, claim 29***, a display portion displaying a plurality of types of printing media (Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- display control means for controlling display portion, on the basis of information indicating the type of said inks discriminated by discrimination portion and information stored in storage portion, to display the type of printing medium having the applicability relation with the type of ink discriminated by discrimination portion (Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of reducing errors in the selection process by the user.

- a selection portion for selecting, from among two or more types of printing media displayed by display portion, the type of said printing medium used for printing (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- ***regarding claim 27***, a display portion for displaying all the types of printing media useable in printing apparatus (Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of reducing errors in the selection process by the user.

Art Unit: 2853

- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- ***further regarding claim 27, regarding claim 31, and regarding claim 33***, warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion (Column 3, Lines 63 – 67), for the purpose of reducing errors in the selection process.

- ***regarding claim 30, regarding claim 32, regarding claim 33, regarding claim 34, and regarding claim 35***, displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- ***further regarding claim 30, regarding claim 32, regarding claim 34, and regarding claim 35***, two or more types of printing media are displayed which having the applicability relation with the type of ink discriminated by discrimination portion, and the type of printing medium is not displayed which having no applicability relation with the type of ink discriminated by discrimination portion (Column 4, Lines 22

Art Unit: 2853

– 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- ***further regarding claim 31***, displaying, as reference information for selecting printing medium on which the image is printed, the plurality of types of printing medium adaptable to the type of printing material discriminated by discriminating step (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- ***further regarding claims 27,28,33 and 35***, selecting/reselecting printing medium on which the image is printed on the basis of the reference information; effecting printing on printing medium selected by selecting step printing medium on which the image is printed on the basis of the reference information; effecting printing on printing medium selected by selecting step (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

Jones discloses:

- ***regarding claims 26,29,30,32,34, and 35***, wherein the discrimination portion determines the type of the ink based on the shape of the ink tank (Column 4, Lines 6-9; 29-34), for the purpose of distinguishing among different differentiation elements.

Mizutani discloses:

- ***regarding claims 27,28,31, and 33***, determining means for determining the type of the printing medium, as a printing medium to be used for the printing, which is the type of printing medium warned or not warned by the warning means (Abstract; Column 2, Lines 37-50), for the purpose of producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of a display portion displaying a plurality of types of printing media; display control means for controlling display portion, on the basis of information indicating the type of said inks discriminated by discrimination portion and information stored in storage portion, to display the type of printing medium having the applicability relation with the type of ink discriminated by discrimination portion; a selection portion for selecting, from among two or more types of printing media displayed by display portion, the type of said printing medium used for printing; a display portion for displaying all the types of printing media useable in printing apparatus; a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing; warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion; displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step; two or more types of printing media are displayed which having the applicability relation with

Art Unit: 2853

the type of ink discriminated by discrimination portion, and the type of printing medium is not displayed which having no applicability relation with the type of ink discriminated by discrimination portion; displaying, as reference information for selecting printing medium on which the image is printed, the plurality of types of printing medium adaptable to the type of printing material discriminated by discriminating step; selecting printing medium on which the image is printed on the basis of the reference information; effecting printing on printing medium selected by selecting step; wherein the discrimination portion determines the type of the ink based on the shape of the ink tank; determining means for determining the type of the printing medium, as a printing medium to be used for the printing, which is the type of printing medium warned or not warned by the warning means as taught by Ohtsuka et al into the device of Irizawa et al, Jones and Mizutani, for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium and reducing errors in the selection process by the user; distinguishing among different differentiation elements; and producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

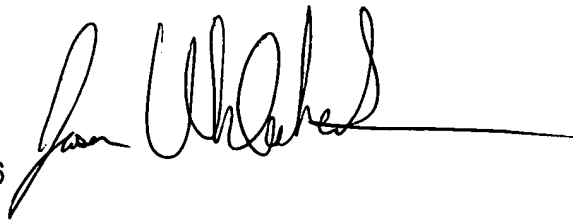
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSU
August 11, 2006



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER